

CLAIMS

1. A communication terminal apparatus comprising:

5 signal point arranging means for arranging signal points based on power ratio information which is a ratio of transmission power of a common known signal to transmission power of a signal included in a channel that does not have a known signal; and

10 demodulating means for performing quadrature amplitude demodulation of received data based on the signal points arranged by said signal point arranging means.

2. The communication terminal apparatus according to
15 claim 1, further comprising extracting means for extracting the power ratio information included in signals transmitted from a base station apparatus, wherein said signal point arranging means arranges the signal points based on the power ratio information
20 extracted by said extracting means.

3. A communication terminal apparatus comprising:

25 signal point arranging means for arranging signal points based on an average power ratio which is a ratio of reception power of a common known signal transmitted from a base station apparatus to an average value for each processing timing of reception power of signals included in a channel that does not have a known signal;

and

demodulating means for performing quadrature amplitude demodulation of received data based on signal points arranged by said signal point arranging means.

5

4. A base station apparatus comprising:

modulating means for switching a modulation method according to an estimated channel condition and modulating transmit data;

10

power ratio information calculating means for calculating power ratio information which is a ratio of transmission power of a common known signal to transmission power of a signal included in a channel that does not have a known signal; and

15

transmitting means for transmitting calculated power ratio information to the communication terminal apparatus according to claim 2.

5. A demodulation method comprising the steps of:

20

arranging signal points based on power ratio information which is a ratio of transmission power of a common known signal to transmission power of a signal included in a channel that does not have a known signal; and

25

performing quadrature amplitude demodulation of received data based on arranged signal points.